"MEASUREMENT SHEETS"

Name of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara 1st, 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

"FIRST AND FINAL BILL"

Name of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara 1st, 2nd & 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

Measurement recorded on:

	Discription of Item	No	Length	A.Breadth	Depth	Qty	Unit
	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Item 19.1 of PWD SR 2018-19)						
	Vide premeasurement page no. 1					271.26	Cum
					Present Qty	**271.26**	**Cum**
	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / Item 2.3 SR 2018-19)						
	Vide premeasurement page no. 2 to 3					904.64	Cum
					Present Qty	**904.64**	**Cum**
	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.3 of PWD SR 2018-19)						
	Vide premeasurement page no. 4 to 5					342.05	Cum
					Present Qty	**342.05**	**Cum**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Yelahanka Sub Division
(BBMP Ynk Zn)
Yelahanka, Bangalore

e of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara t, 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

asurement recorded on:

m o	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	Providing laying palin / reinforced cement concrete for Box Drain walls of thicknes 10cm to 20 cm including cenmtering shuttering form work etc. complete as per approved drawiong and design MORTH Specification No. 1500,1700,2200 PCC M 20 Grade upto 0.75 m height using concrete mixture (KPWD SR 2018-19 Item No-37.59.2)						
	For Raft						
	For CC Drain						
	Vinayak nagar						
	1st Main Road (RHS)	1	30.00	0.90	0.15	4.05	
		1	30.00	0.90	0.15	4.05	
		1	10.00	0.90	0.15	1.35	
		1	30.00	0.90	0.15	4.05	
		1	30.00	0.90	0.15	4.05	
		1	9.00	0.90	0.15	1.22	
	Lake View Layout						
	2nd Main Road(A)						
		1	30.00	1.20	0.15	5.40	
		1	30.00	0.90	0.15	4.05	
		1	6.80	0.90	0.15	0.92	
	Culvert 1	1	6.00	1.20	0.15	1.08	
		1	30.00	0.90	0.15	4.05	
		1	30.00	0.90	0.15	4.05	
		1	22.00	0.90	0.15	2.97	
	Culvert 2	1	5.60	1.20	0.15	1.01	
		1	30.00	0.90	0.15	4.05	
		1	15.80	1.20	0.15	2.84	
	Cross Road (B)	1	18.50	0.90	0.15	2.50	
	Cross Road (C)	1	30.00	1.20	0.15	5.40	
		1	0.60	1.20	0.15	0.11	
	2nd "A" Cross road (D)	1	30.00	0.90	0.15	4.05	
		1	5.80	0.90	0.15	0.78	
	4th Cross Road (2nd main to 4th main)						
		2	30.00	0.90	0.15	8.10	
		2	30.00	0.90	0.15	8.10	
		2	23.50	0.90	0.15	6.35	

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
Culvert	1	6.50	1.20	0.15	1.17	
4th Main Road (4th Cross Road)	1	25.50	0.90	0.15	3.44	
Keri Road	1	30.00	0.90	0.15	4.05	
	1	8.20	0.90	0.15	1.11	
	1	7.50	0.90	0.15	1.01	
	1	30.00	0.90	0.15	4.05	
	1	30.00	0.90	0.15	4.05	
	1	23.00	0.90	0.15	3.11	
Culvert	1	7.50	1.20	0.15	1.35	
Culvert Ramp	8	7.00	1.00	0.10	5.60	
Placed on side of the drain	1	32.00	1.00	0.15	4.80	
For Walls						
For CC Drain						
Vinayak nagar						
1st Main Road (RHS)	2	30.00	0.15	0.80	7.20	
	2	30.00	0.15	0.70	6.30	
	2	10.00	0.15	0.75	2.25	
	2	30.00	0.15	0.70	6.30	
	2	30.00	0.15	0.70	6.30	
	2	9.00	0.15	0.70	1.89	
Lake View Layout						
2nd Main Road(A)						
	2	30.00	0.15	0.60	5.40	
	2	30.00	0.15	0.60	5.40	
	2	6.80	0.15	0.70	1.43	
Culvert 1	2	6.00	0.30	0.70	2.52	
	2	30.00	0.15	0.70	6.30	
	2	30.00	0.15	0.70	6.30	
	2	22.00	0.15	0.60	3.96	
Culvert 2	2	5.60	0.30	0.65	2.18	
	2	30.00	0.15	0.70	6.30	
	2	15.80	0.15	0.65	3.08	
Cross Road (B)	2	18.50	0.15	0.60	3.33	
Cross Road (C)	2	30.00	0.15	0.60	5.40	
	2	0.60	0.15	0.60	0.11	
2nd "A" Cross road (D)	2	30.00	0.15	0.60	5.40	
	2	5.80	0.15	0.60	1.04	

No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	4th Cross Road (2nd main to 4th main)						
		4	30.00	0.15	0.7	12.96	
		4	30.00	0.15	0.7	12.96	
		4	23.50	0.15	0.7	10.15	
	Culvert	2	6.50	0.30	0.7	2.81	
	4th Main Road (4th Cross Road)	2	25.50	0.15	0.60	4.59	
	Keri Road	2	30.00	0.15	0.70	6.30	
		2	8.20	0.15	0.65	1.60	
		2	7.50	0.15	0.60	1.35	
		2	30.00	0.15	0.70	6.30	
		2	30.00	0.15	0.65	5.85	
		2	23.00	0.15	0.60	4.14	
	Culvert	2	7.50	0.30	0.70	3.15	
					Present Qty	**278.86**	**Cum**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

Name of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara 1st, 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

Pre Measurement recorded on:

Item No	Discription of Item	No	Length	Breadth	Depth	Qty	Unit
5	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3- TMT bars Fe 500`(PW,P& IWTD SR 2018-19, Pg No 17 Item No.4.46.2)						
	Vide premeasurement page no. 6 to 8					14.35	Tn
					Qty Limited to	**14.35**	**Tn**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Yelahanka Sub Divisi..
(BBMP Ynk Zn)
Yelahanka, Bangalore

of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

urement recorded on:

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
Providing and Fixing **RCC pre cast covering Slab of 100mm thick** for drains in cement concrete M20 using graded grinite jelly 20mm and down size with steel reinforcement, including from work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in charge. (Data Rate)						
For CC Drain						
Vinayak nagar						
1st Main Road (RHS)	1	30.00	0.90		27.00	
	1	30.00	0.90		27.00	
	1	10.00	0.90		9.00	
	1	30.00	0.90		27.00	
	1	30.00	0.90		27.00	
	1	9.00	0.90		8.10	
Lake View Layout						
2nd Main Road(A)						
	1	30.00	0.75		22.50	
	1	30.00	0.75		22.50	
	1	6.80	0.75		5.10	
	1	30.00	0.75		22.50	
	1	30.00	0.75		22.50	
	1	22.00	0.75		16.50	
	1	30.00	0.75		22.50	
	1	15.80	0.75		11.85	
Cross Road (B)	1	18.50	0.75		13.88	
Cross Road (C)	1	30.00	0.75		22.50	
	1	0.60	0.75		0.45	
2nd "A" Cross road (D)	1	30.00	0.75		22.50	
	1	5.80	0.75		4.35	
4th Cross Road (2nd main to 4th main)	2	30.00	0.90		54.00	
	2	30.00	0.75		45.00	
	2	23.50	0.75		35.25	
4th Main Road (4th Cross Road)	1	25.50	0.75		19.13	
Keri Road	1	30.00	0.75		22.50	

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
	1	8.20	0.75		6.15	
	1	7.50	0.75		5.63	
	1	30.00	0.75		22.50	
	1	30.00	0.75		22.50	
	1	23.00	0.75		17.25	
				Present Qty	**584.63**	**Sqm**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

rement recorded on:

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge						
For CC Culvert Top Covering Slab						
Lake View Layout						
	1	6.00	1.50		9.00	
	1	5.60	1.50		8.40	
	1	6.50	1.20		7.80	
Keri Road	1	7.50	1.20		9.00	
Slabs placed above an existing	1	7.10	1.20		8.52	
	1	7.20	1.50		10.80	
	1	7.00	1.50		10.50	
	1	7.30	1.50		10.95	
	1	7.50	1.50		11.25	
	1	6.50	1.50		9.75	
				Present Qty	**95.97**	**Sqm**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara 1st, 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

easurement recorded on:

Discription of Item	No	Length	A.Breadth	Depth	Qty	Unit
Cement concrete pavement.Construction of un-reinforced plain **cement concrete pavement**, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix **M20/M30** , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) (item no 22.6.1, SR 2018-19)						
Vinayak Nagar						
1st cross road	1	0.00	6.20	0.125	0.00	
	1	15.00	6.30	0.125	11.81	
	1	18.30	6.30	0.125	14.41	
	1	19.00	6.30	0.125	14.96	
	1	22.00	6.10	0.125	16.78	
2nd cross road	1	0.00	5.80	0.125	0.00	
	1	10.90	6.40	0.125	8.72	
	1	0.00	5.40	0.125	0.00	
	1	6.80	5.40	0.125	4.59	
	1	0.00	5.50	0.125	0.00	
	1	10.00	5.00	0.125	6.25	
	1	0.00	6.30	0.125	0.00	
	1	30.00	6.10	0.125	22.88	
	1	0.00	6.40	0.125	0.00	
	1	19.50	6.40	0.125	15.60	
3rd cross road	1	0.00	6.00	0.125	0.00	
	1	30.00	5.60	0.125	21.00	
	1	7.50	6.10	0.125	5.72	
	1	9.50	5.80	0.125	6.89	
	1	0.00	5.30	0.125	0.00	
	1	16.70	5.40	0.125	11.27	
	1	0.00	5.50	0.125	0.00	
	1	11.70	6.00	0.125	8.78	
				Present Qty	**169.65**	**Cum**

Asst. Executive Engineer

of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara h 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

urement recorded on:

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete (Item 5.30 KPWD SR 2018-19)						
For Kerb Stone						
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	30.00	/0.45	= 30.00	66.67	
	1	22.00	/0.45	= 22.00	48.89	
				Present Qty	**~~1248.89~~**	**Nos**

Limit @ 1280.00 5986.00/6.45

Limit @ = 1280.00

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer,

(10)

30 X 18 = 540

+22 = 562

of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara , 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

surement recorded on:

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
KSRB 15-19.1 : Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, complete as per specifications. (Item No- 15.80 of KPWD SR 2018-19)						
For Kerb Stone						
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	20.00		0.40	8.00	
				Present Qty	**224.00**	**Nos**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Yelahanka Sub Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore

of Work:Improvements to main road, cross roads and providing kerb stones at Vinayaka Nagara , 5th 3rd cross roads in Kempegowda ward no - 01 and Improvements to roads and drains at Lake view layout and surrounding areas in Kempegowda ward no - 01 (Package-03)

urement Recorded on :

Discription of Item	No	Length	Breadth	Depth	Qty	Unit
KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Item 24.1 of KPWD SR 2018-19)						
For Kerb Stone						
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	30.00		0.40	12.00	
	1	20.00		0.40	8.00	
				Present Qty	**224.00**	**Sqm**

Contractor

Newzen Consultants Bangalore PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Yelahanka Sub. Division
(BBMP Ynk. Zn)
Yelahanka, Bangalore